

AMENDMENTS TO THE CLAIMS

1 1 - 38. (Canceled).

1 39. (Previously Presented) A method of satisfying a resource request in a computer
2 system for configuring systems, the method comprising:
3 instantiating in the computer system a configuration instance from a configuration model,
4 wherein the configuration model includes a defined structural hierarchy of
5 elements and a plurality of resources offered by elements in the structural model
6 hierarchy;
7 (a) examining the configuration instance for one of the elements offering a resource in
8 response to a request for the resource, wherein the resource offered by at least one
9 of the elements in the structural model hierarchy represents a pool of resources;
10 (b) selecting the element when the resource offered by the element has not been
11 previously consumed;
12 (c) selecting a newly created element instance that offers the resource if no existing
13 elements satisfy the resource request; and
14 (d) repeating (a) through (d) when the element selection does not satisfy the resource
15 request.

1 40. (Canceled).

1 41. (Currently Amended) The method of claim [40] 39 wherein each element
2 offering a resource that includes a pool of resources is a structural superior in the structural
3 model hierarchy to an element consuming the resource.

1 42. (Currently Amended) The method of claim [40] 39 wherein a plurality of the
2 resources in the pool of resources combine to satisfy the resource request.

1 43. (Currently Amended) The method of claim [40] 39 wherein one of the resources
2 in the pool of resources satisfies the resource request.

1 44. (Currently Amended) The method of claim [40] 39 wherein the element offering
2 the resource includes multiple power supplies whose combined power supply capacity is pooled
3 to provide the requested resource.

4 45. (Previously Presented) The method of claim 39 wherein the combination of
5 multiple like resources comprises resources inherited from at least one other element.

1 46. (Previously Presented) The method of claim 45 wherein each element offering a
2 resource includes resources inherited from at least one other element is a structural superior in
3 the structural model hierarchy to an element consuming the resource.

1 47. (Previously Presented) The method of claim 45 wherein a plurality of the
2 resources inherited from at least one other element combines to satisfy the resource request.

1 48. (Previously Presented) The method of claim 45 wherein one of the resources
2 inherited from at least one other element satisfies the resource request.

1 49. (Previously Presented) The method of claim 39 wherein the configuration
2 instance is empty when a new configuration is being defined and the configuration instance
3 includes an existing configuration when an existing system is being updated.

1 50. (Previously Presented) An apparatus for configuring systems comprising:
2 a processor;
3 a memory coupled to the processor;
4 a model stored in the memory, wherein elements included in the model are defined in a
5 structural model hierarchy and each of the elements offers one or more resources;
6 a configuration engine, stored in the memory and executable by the processor, to satisfy a
7 resource request using a resource offered by one of the elements, wherein the
8 configuration engine includes code executable by the processor for:
9 instantiating in the computer system a configuration instance;

10 (a) examining the configuration instance for one of the elements offering a
11 resource in response to a request for the resource, wherein the resource
12 offered by at least one of the elements in the structural model hierarchy
13 represents a pool of resources;
14 (b) selecting the element when the resource offered by the element has not been
15 previously consumed;
16 (c) selecting a newly created element instance that offers the resource if no
17 existing elements satisfy the resource request; and
18 (d) repeating step (a) through (d) when the element selection does not satisfy the
19 resource request.

1 51. (Canceled).

1 52. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein each
2 element offering a resource that includes a pool of resources is a structural superior in the
3 structural model hierarchy to an element consuming the resource.

1 53. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein a plurality
2 of the resources in the pool of resources combine to satisfy the resource request.

1 54. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein one of the
2 resources in the pool of resources satisfies the resource request.

1 55. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein the element
2 offering the resource includes multiple power supplies whose combined power supply capacity is
3 pooled to provide the requested resource.

4 56. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein the
5 combination of multiple like resources comprises resources inherited from at least one other
6 element

1 57. (Currently Amended) The ~~method~~ apparatus of claim 50 wherein each element
2 offering a resource includes resources inherited from at least one other element is a structural
3 superior in the structural model hierarchy to an element consuming the resource.

1 58. (Currently Amended) The ~~method~~ apparatus of claim 57 wherein a plurality of
2 the resources inherited from at least one other element combines to satisfy the resource request.

1 59. (Currently Amended) The ~~method~~ apparatus of claim 57 wherein one of the
2 resources inherited from at least one other element satisfies the resource request.

1 60. (Currently Amended) The ~~method~~ apparatus of claim 50 wherein the
2 configuration instance is empty when a new configuration is being defined and the configuration
3 instance includes an existing configuration when an existing system is being updated.

1 61. (Previously Presented) An article of manufacture comprising code encoded
2 therein and executable by a processor to cause the processor to:
3 instantiate in the computer system a configuration instance from a configuration model,
4 wherein the configuration model includes a defined structural hierarchy of
5 elements and a plurality of resources offered by elements in the structural model
6 hierarchy;
7 (a) examine the configuration instance for one of the elements offering a resource in
8 response to a request for the resource, wherein the resource offered by at least one
9 of the elements in the structural model hierarchy represents a pool of resources;
10 (b) select the element when the resource offered by the element has not been previously
11 consumed;
12 (c) select a newly created element instance that offers the resource if no existing elements
13 satisfy the resource request; and
14 (d) repeat (a) through (d) when the element selection does not satisfy the resource
15 request.

1 62. (Previously Presented) An apparatus for satisfying a resource request in a
2 computer system for configuring systems using a resource comprising a combination of
3 resources comprising:
4 a processor;
5 a memory coupled to the processor;
6 a model stored in the memory, wherein elements included in the model are defined in a
7 structural model hierarchy and each of the elements offers one or more resources;
8 means for defining a structural model hierarchy and a plurality of resources offered by
9 elements in the structural model hierarchy;
10 means for instantiating in the computer system a configuration instance;
11 (a) means for examining the configuration instance for one of the elements offering a
12 resource in response to a request for the resource, wherein the resource offered by
13 at least one of the elements in the structural model hierarchy represents a pool of
14 resources;
15 (b) means for selecting the element when the resource offered by the element has not
16 been previously consumed;
17 (c) means for selecting a newly created element instance that offers the resource if no
18 existing elements satisfy the resource request; and
19 (d) means for causing (a) through (d) to search for another element to satisfy the resource
20 request when the element selection does not satisfy the resource request.

1 63. (New) The article of manufacture of claim 61 wherein each element offering a
2 resource that includes a pool of resources is a structural superior in the structural model
3 hierarchy to an element consuming the resource.

1 64. (New) The article of manufacture of claim 61 wherein a plurality of the
2 resources in the pool of resources combine to satisfy the resource request.

1 65. (New) The article of manufacture of claim 61 wherein one of the resources in the
2 pool of resources satisfies the resource request.

1 66. (New) The article of manufacture of claim 61 wherein the element offering the
2 resource includes multiple power supplies whose combined power supply capacity is pooled to
3 provide the requested resource.

4 67. (New) The article of manufacture of claim 61 wherein the combination of
5 multiple like resources comprises resources inherited from at least one other element

1 68. (New) The article of manufacture of claim 61 wherein each element offering a
2 resource includes resources inherited from at least one other element is a structural superior in
3 the structural model hierarchy to an element consuming the resource.

1 69. (New) The article of manufacture of claim 68 wherein a plurality of the resources
2 inherited from at least one other element combines to satisfy the resource request.

1 70. (New) The article of manufacture of claim 68 wherein one of the resources
2 inherited from at least one other element satisfies the resource request.

1 71. (New) The article of manufacture of claim 61 wherein the configuration instance
2 is empty when a new configuration is being defined and the configuration instance includes an
3 existing configuration when an existing system is being updated.